

**Commonwealth of Kentucky  
Division for Air Quality**

***RESPONSE TO COMMENTS***

ON THE CONDITIONAL MAJOR DRAFT PERMIT F-01-020

ALCOA AUTOMOTIVE CASTINGS

HAWESVILLE, KENTUCKY 42348

JANUARY 13, 2004

REVIEWER: BRIAN SMITH

PLANT I.D. # 21-091-00023

APPLICATION LOG # 53672

**SOURCE DESCRIPTION:**

Alcoa Automotive Castings in Hawesville, Kentucky is an aluminum foundry that produces forged and cast aluminum parts for automotive industries. The facility is comprised of a Casting Area and a Forging Area in one building, and also a Foil Building containing two additional reverberatory furnaces. The facility melts aluminum ingots purchased from outside suppliers, customer returns, and internal scrap in order to produce parts through a variety of operations.

Alcoa has been operating under two separate permits: one permit for the Casting and Forging areas, and another permit for the Foil Building. They are requesting a consolidation of these permits into a single source-wide conditional major permit. Alcoa will take federally-enforceable emission limits to keep potential emissions of triethylamine, hydrochloric acid, and total HAP's below major source thresholds.

**PUBLIC REVIEW:**

On September 4, 2003, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Hancock Clarion* in Hawesville, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Alcoa Automotive Castings on October 1, 2003. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit.

# ATTACHMENT A

## Response to Comments

Comments and Suggested Revisions on the Draft Conditional Major Permit submitted by Charles McDaniel, Alcoa Automotive Castings.

### **CHARGE MATERIAL LIMITATIONS**

On Page 2 of the draft permit, the word “clean” has been added to the description of Group 1 charge material preceding “customer returns.” This occurs in two places. In addition, the structure of the sentence on Page 3, Operating Limitations (1)(a) was similarly changed. The draft permit is contrary to 40 CFR Part 63, Subpart RRR, (Secondary MACT) and it is more stringent than the Secondary MACT regulation. This is a concern for Alcoa because some customer returns and internal scrap used at KCC may have minor amounts of residual lubricant or cutting fluids on them, and because these materials have not gone through a cleaning process to render them “free” of these fluids.

The definitions appearing at 40 CFR §63.1503 establish what constitutes **clean charge, customer returns** and **internal scrap**. The qualifying word “clean” does not appear in the definition of either **customer returns** or **internal scrap**. The draft permit adds the qualifier “clean” to the terms “customer returns” and “internal scrap.” This addition is inconsistent with the regulatory definitions of §63.1503 and makes the permit requirements inconsistent with the **secondary aluminum production facility** applicability criteria. The U.S. Environmental Protection Agency states that “...For purposes of this subpart (*i.e.* 40 CFR Part 63, Subpart RRR), aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are *clean charge, customer returns, or internal scrap*, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns.” Revision of the draft permit is necessary for regulatory uniformity, consistent application of the NESHAP and to ensure that KCC is not placed at a competitive or economic disadvantage by subjecting it to more rigorous regulatory requirements than its competition.

As supporting documentation of the above, we have attached the relevant definitions from section (§63.1503) of the NESHAP and the applicability section (§63.1500) of Subpart RRR as **Attachment A**.

### **Suggested Language for Final Permit:**

#### **Section B, Description (p. 2)**

“Each emission unit is a natural gas-fired reverberatory furnace. Emission points 1, 18, and 19 (located in the Casting Building) each melt 2 tons/hour of ***clean charge, internal scrap, and customer returns (as defined in 40 CFR 63.1503)***. Emission points F06 and F07 (located in the Foil Building) each melt 2.3 tons/hour of ***clean charge, internal scrap, and customer returns (as defined in 40 CFR 63.1503)***. Reactive salt...”

#### **Section B. 1.a., Operating Limitations (p. 3)**

“a. The permittee shall melt only **clean charge, internal scrap and customer returns (as defined**

*in 40 CFR 63.1503) unless prior notification is sent to the EPA and the KDAQ state agency.”*

*Division’s response: The Division concurs with these comments and has revised the permit.*

### **CONSISTENCY OF MONITORING AND RECORDKEEPING REQUIREMENTS**

There is no opacity monitoring frequency identified in **Section B.(4)(b)(ii)** on Page 5 of the draft permit. The monitoring frequency of this requirement should be consistent with the quarterly frequency identified in Section B.(4)(b)(i), and Section B.(5)(c) on Page 6. Specifically, the Section B.(5) (c) recordkeeping requirement states:

- “(c) A log of quarterly opacity observations which shall note:
- i. Whether any air emissions were visible from the stack/vent.
  - ii. All emission points from which visible emissions occurred.
  - iii. Whether the visible emissions were normal for the process.
  - iv. The opacity of the emissions as determined by Reference Method 9 and any other corrective actions, if visible emissions from any stack or vent is seen.”

It seems logical that the monitoring requirements in **(4)(b)** were intended to have a quarterly frequency, given that a quarterly frequency is specified in **(4)(b)(i)** and 5(c). Therefore, the following revision is necessary to maintain consistency among the requirements in the permit:

Section B.4.(b)(ii) [page 5]:

(b)(ii) “Determine the opacity of the emissions by Reference Method 9 if visible emissions from any stack or vent is seen **during the quarterly qualitative opacity observation as required under (4)(b)(i) above.**”

Alcoa also believes that a specified duration for the qualitative visual observation of opacity under **(4)(b)(i) should be added to the permit**. Alcoa suggests that qualitative visual opacity observation be not less than six minutes in duration.

*Division’s response: The Division concurs with these comments and has revised the permit.*

### **FEDERALLY ENFORCEABLE LIMITATIONS**

Alcoa proposed a general plant-wide emission limitation for HAP’s, which requested a limitation for individual HAP emissions and an aggregate HAP limit to ensure that KCC would not be classified as a major source and that the area source requirements of Secondary MACT would be applicable to the facility.

Alcoa’s previously proposed permit limitation read as follows:

“The source-wide emissions of **any single hazardous air pollutant (HAP) shall not**

**exceed 9.4 tons per 12-month rolling time period**, nor shall the source-wide total emissions of all HAPs combined exceed 24.4 tons per 12-month rolling time period. (Self-imposed to preclude major source classification pursuant to 401 KAR 52:020, Permits)”

By eliminating the proposed language regarding any individual HAP, the facility is left without a federally enforceable limit on individual HAPs outside of the HCl, TEA, and HF permit limits. The permit language appearing in Section D.3. of the draft permit (p. 13) does not provide sufficient limitations to ensure that KCC will not be classified as a major source and or that ensures the area source requirements of Subpart RRR would remain applicable to the facility.

Therefore, Alcoa requests that Condition 3 in Section D either be changed back to the Proposed Language (as presented above), or that new language be added to Condition 3 of the draft permit as follows:

Alternative Section D. 3 Final Permit Language:

“3. The source-wide emissions of HCl shall not exceed 9.4 tons per 12-month rolling time period. The source-wide emissions of triethylamine shall not exceed 4.7 tons per 12-month rolling time period. **The source-wide emissions of any single hazardous air pollutant (HAP) shall not exceed 9.4 tons per 12-month rolling time period.** The source-wide total emissions of all HAPs combined shall not exceed 22.5 tons per 12-month rolling time period. (Self-imposed to preclude major source classification pursuant to 401 KAR 52:020, Permits)”

*Division’s response: The Division concurs with these comments and has revised the permit.*

**FEDERALLY-ENFORCEABLE PERMITS FOR NON-MAJOR SOURCES**

Alcoa requests that HF be included in the listing of pollutants subject to 401 KAR 52:030. The language of the final permit should be amended to include hydrogen fluoride (HF) in this listing. The applicable regulation portion of Section B, Applicable Regulations should be amended to read as follows:

401 KAR 52:030 – Federally-enforceable permits for non-major sources. **Applies to HF and HCl emissions.”**

This change should be made on both Page 2 and Page 8 where this applicability is shown to apply.

*Division’s response: The Division concurs with these comments and has revised the permit.*

**STACK IDENTIFICATION NUMBERS**

Under the **Description** of Group 2 equipment on Page 7 of the draft permit, the line that describes the “Stack #” lists “**#21 and #22**” as vent ID numbers. The roof vent that is directly above the casting lines is one continuous vent along the Casting Building and does not have any distinguishable points of release. As such, the number references should be deleted from the Stack

description, as follows:

**“Stack #: Casting Building roof vent”**

*Division’s response: The Division concurs with this comment and has revised the permit.*

### **INSIGNIFICANT ACTIVITIES**

An additional activity should have been listed in SECTION C – INSIGNIFICANT ACTIVITIES. A “Die Preheat Oven” in the Forging Area of the KCC facility was omitted from the listing of insignificant activities. This Die Preheat Oven was included in the Insignificant Activity document that was submitted to KDAQ (See Line 8 of Table 2-2 on Page 3 of the Insignificant Activity document), but failed to make it on the permit list. The final permit should be revised to include this insignificant activity.

*Division’s response: The Division concurs with this comment and has revised the permit.*

### **TYPOGRAPHICAL ERROR**

A minor change is needed to correct a typographical error that was discovered while reviewing the SECTION G – GENERAL PROVISIONS. On Page 21 of the draft permit, SECTION G (e)(3) refers to “General Provision G(f)1 above.” This reference should say “General Provision **G(e)1** above”.

*Division’s response: The Division concurs with this comment and has revised the permit.*

### **COMPLIANCE CERTIFICATIONS**

Section F.9. of the Monitoring, Record Keeping, and Reporting Requirements establishes a requirement for the permittee to annually “certify compliance” with the terms and conditions of the permit. The General Provision requirements of Section G.(a).1 renders **“all”** terms and conditions of the permit subject to this annual certification of compliance. Some of the permit terms are neither limitations nor requirements for the permittee. They are simply statements of regulatory process or authority (*e.g. Section G.(a).3, Section G.(a).8, Section G.(a).9, etc.*) .

These non-regulatory terms should be excluded from the annual compliance certification requirement or provisions incorporated into the permit clarifying that permittee is deemed compliant with the non-emission, non- monitoring, non-recordkeeping, and non-reporting conditions of this permit because they do not establish any permittee requirements.

If KYDAQ does not exclude these terms from the compliance certification requirement, it will be necessary for KYDAQ to provide a basis for certifying compliance with the numerous “non-emission, non- monitoring, non-recordkeeping, and non-reporting” conditions of this permit. To accomplish this, it is suggested that an additional item be included in the listing of requirements in Section F.9. The new item would provide a compliance certification mechanism for the

administrative and regulatory process related requirements in the permit.

Suggestion for addition of Section F. 9.g.:

“g. Compliance with the non-emission, non- monitoring, non-recordkeeping, and non-reporting requirements of this permit shall be deemed compliant if the permittee certifies compliance with the applicable numerical emission limitations, monitoring requirements, recordkeeping requirements, and reporting requirements of this permit.”

*Division’s response: Section F is standard language developed with concurrence and approval of U.S. EPA. The Division recognizes that some terms and conditions are required to be contained within the permit by regulation. Sources may certify compliance with such terms and conditions as appropriate in their compliance certification. The Division feels that no change is necessary.*

**STAY OF PERMIT TERMS DURING APPEALS**

Permittees who consider themselves aggrieved by a final determination (*i.e. final permit*) are afforded an opportunity to petition for the review of objectionable permit terms pursuant to 401 KAR 100.010, Section 13. Section G.5. of the draft permit does not stay the applicability of permit terms subject to an appeal (*i.e. petition for the review*) and they remain in affect until the petitions are resolved. It is not equitable to retain appealed portions of the permit as applicable requirements until the administrative procedures have been concluded. Because of the significant liability that can accrue during lengthy administrative appeal proceedings, the draft permit should be amended in such a way as to stay those parts of the permit for which an appeal was filed. Below please find a proposed permit amendment to mitigate this inequity.

Alcoa’s proposed permit amendment ( addition to Section G.5.)

“An appeal of any permit term or condition shall affect only those parts of the permit for which the appeal was submitted pursuant to 401 KAR 100.010, Section 13; and the applicability of those parts of the permit for which the appeal was submitted shall be stayed until proceedings to resolve the appeal have been concluded.”

*Division’s response: The permit condition in question here is Section G(a)(5), not G(5). Section G of this permit is used for all permits issued under 401 KAR 52:030. This permit is subject to both state and federal requirements. 401 KAR 100:010 is not part of Kentucky's State Implementation Plan, and is not part of the regulations adopted by U.S. EPA. As such, U.S. EPA is not subject to 401 KAR 100.010.*